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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,607	07/19/2006	Tetsuya Kohno	293159US3PCT	5945
22850 7590 01/22/2009 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER DIAZ, THOMAS C				
ART UNIT 3656		PAPER NUMBER		
NOTIFICATION DATE 01/22/2009		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/586,607

Applicant(s)

KOHNO ET AL.

Examiner

THOMAS DIAZ

Art Unit

3656

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 15-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/US)
Paper No(s)/Mail Date 07/19/2006
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

Specification

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: In claim 15, "the opening is in a basically elliptical shape". The opening is defined in the specification as a rectangular shape. Perhaps changing the specification terminology to be consistent with the claim terminology would correct the problem.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 15-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Downs et al. (USP 5951431).

Regarding claims 15-21, Downs et al. discloses a similar device comprising:

- a casing (fig.3, 112) that defines an internal space (fig.3; inside of casing) and an opening (fig.3, 122a) communicated with the internal space and that is rotatable in a given rotational direction and in a rotational direction

opposite to the given rotational direction, the casing including an input portion (fig.3, 38) in which the driving force is input,

- a dividing mechanism (fig.9, 34) that is provided in the internal space, and includes a pinion (fig.9, 34) and that divides the driving force into the first output and the second output; and
- a support member (fig.9, 30) that is provided so as to contact the casing and so as to support the dividing mechanism and that includes a pinion shaft (fig.9, 30) that supports the pinion such that the pinion can rotate on its axis and which makes the pinion revolve around a center of the casing,
- wherein the fatigue life of the casing is adjusted by making a shape of the opening asymmetrical with respect to a rotational axis of the casing (fig.3 and fig.4 show the opening is asymmetrical), wherein the opening is in a basically elliptical shape (see fig.3) having a round shape at each of corner portions, and the round shapes of the adjacent corner portions are different from each other (fig.3, shape of 152 and shape of 154 are different), wherein
- a curvature radius of the round shape of the corner portion of the opening, where a tensile stress is generated when the driving force is input in the given rotational direction (fig.3, 152), is larger than a curvature radius of the round shape of the corner portion of the opening, where a compression stress is generated when the driving force is input in the given rotational direction (fig.3, 154),

- *and wherein the fatigue life of the casing is adjusted by performing heat treatment on a corner portion of the opening of the casing, wherein heat treatment is performed on the corner portion of the opening of the casing, where a tensile stress is generated when the driving force is input in the given rotational direction.*
- the casing includes a support portion (fig.6, 20) that contacts the support member, and the fatigue life is measured by inputting the driving force in the input portion without rotating the support portion.
- the casing includes an output portion (fig.3, 40) that is provided at a position that is different from a position of the support portion, and the fatigue life is measured by inputting the driving force in the input portion without rotating the output portion.

Regarding the product by process recitations in the claims 18-21, and the limitations above denoted by the italicized text. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. Please see MPEP 2113 for more information.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS DIAZ whose telephone number is (571)270-5461. The examiner can normally be reached on Monday-Friday 8:30am to 5:30pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571)272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ Thomas Diaz/
Examiner, Art Unit 3656

/Richard WL Ridley/
Supervisory Patent Examiner, Art Unit 3656